

REMARKS

Claims 1, 3-4, 11, and 14 remain in this application. Claims 1, 4 and 14 have been amended.

Applicant respectfully submits that the above amendments to the claims should be entered and considered since the amendments are made merely to clarify the claims in response to comments made by the Examiner in the Office Action. Applicant respectfully submits that the amendments should not require any further consideration or search since the amendments are made only to clarify what was previously inherently claimed in the claims.

The Office Action rejects claims 1, 3, 4, 11 and 14 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. Claim 1 has now been amended to clarify that function holes and function recesses are defined in the first digital mould pattern, and a product cavity and a parting plane of the mould are defined separate from and parallel to the step of defining the function holes and function recesses, with the product cavity and a parting plane of the mould being defined in the second digital mould pattern. Furthermore, claim 1 has been amended to clarify the claimed method for making an injection mould by now specifically reciting the step of machining the first mould half and the second mould half using said digital information in an NC machine.

Applicant respectfully submits that this step is only added in response to the Examiner's comment that independent claim 1 is incomplete since there is no injection mould formed as a result of performing the claim steps. Nevertheless, Applicant respectfully submits that the claimed method includes the transitional phrase "comprising"

and therefore does not exclude additional, unrecited method steps. Therefore, Applicant submits that it should not be necessary to actually recite the method step of machining since the claimed method is recited in an open-ended format. Nevertheless, in order to expedite prosecution and advance this case to issuance, Applicant has added the claim step of machining in response to the Examiner's comment that independent claim 1 is incomplete.

Claims 1, 3, 4 and 14 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,595,771 (*Foltuz et al.*) in view of U.S. Patent No. 4,795,125 (*Boros et al.*).

Independent claim 1 is directed to a method for making an injection mould, wherein the method comprises a novel combination of steps that includes receiving, in a computer based system, digital information relating to a shape of a product pattern, placing digital information relating to the shape of the product pattern into a first digital mould pattern and into a second digital mould pattern, respectively, wherein the first digital mould pattern represents both the first mould half and the second mould half and wherein the second digital mould pattern represents both the first mould half and the second mould half, defining function holes and function recesses in the first digital mould pattern, and defining, separate from and parallel to the step of defining function holes and function recesses, a product cavity and a parting plane of the mould in the second digital mould pattern.

As described in the specification, by carrying out the defining of function holes and function recesses separate from and parallel to the defining of the product cavity and parting plane of the mould, it is possible to save time since both the defining of function

holes or function recesses and the defining of the product cavity are steps in the production process that can take a long time. A further advantage of this mode of production is that the defining of function holes and function recesses can be begun as soon as a product pattern has been obtained even if the obtained pattern is not of the desired quality.

Accordingly, the novel combination of features claimed in independent claim 1, and described in the specification at page 11, lines 28-34, sets forth that the process for defining function holes and function recesses, as well as the process for defining a product cavity and the parting plane of the mould, are carried out separately from each other, in separate mould patterns, and in parallel. As one example, the processes could be carried out in two different computers and simultaneously.

In contrast to the method for making an injection mould as claimed in independent claim 1, *Foltuz et al.* does not disclose a method for making an injection mould. The Office Action refers to column 5, lines 3-7 of *Foltuz et al.*, and states that it is inherent that a product pattern be received in order for the location and sizes of the holes, recesses, and cavities to be defined. Applicant respectfully submits that even if it were true that it is inherent that a product pattern be received in order for the location and sizes of the holes, recesses and cavities to be defined, this provides absolutely no disclosure or suggestion of a method for making an injection mould wherein function holes and function recesses are defined in a first digital mould pattern, separate from and parallel to the step of defining a product cavity and a parting plane of the mould in a second digital mould pattern. *Foltuz et al.* discloses a mould assembly 10 generally comprising a plurality of sections, with a fixed side 12 and an ejector side 14, and mould inserts 55b, 55d, 55e, and 55f used in forming a

moulded component 100. The plurality of interchangeable modules allow for the shaping of a plurality of sides of a component. However, *Foltuz et al.* provides absolutely no disclosure or suggestion of a method for actually making the injection mould or mould inserts.

Boros et al. is relied upon in the Office Action for allegedly disclosing an injection mould assembly for a computer-based system which inherently comprises digital information. Applicant respectfully submits that even if *Boros et al.* does recognize that the base plates for a mould can be prefabricated using a programmed production operation, this provides absolutely no suggestion of defining function holes and function recesses in a first digital mould pattern separate from and parallel to the step of defining a product cavity and a parting plane of the mould in a second digital mould pattern.

For at least the above reasons, Applicant respectfully submits that neither *Foltuz et al.* nor *Boros et al.*, whether considered alone or in combination, disclose or suggest a method for making an injection mould comprising a novel combination of steps that includes defining function holes and function recesses in the first digital mould pattern separate from and parallel to the step of defining a product cavity and a parting plane of the mould in a second digital mould pattern. Accordingly, Applicant submits that independent claim 1 is novel and non-obvious in view of *Foltuz et al.* and *Boros et al.* Dependent claims 3, 4, 11 and 14 are also patentable over *Foltuz et al.* in view of *Boros et al.* for at least the same reasons as discussed above with regard to independent claim 1, from which they depend. Accordingly, Applicant submits that claims 1, 3, 4, 11 and 14 are in condition for allowance.

Prompt issuance of a Notice of Allowance is earnestly solicited. In the event any questions arise regarding this communication or the application in general, please contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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